

# AF1716 Architecture and Build-ing Techniques 7.5 credits

Arkitektur, byggnadstekniken

This is a translation of the Swedish, legally binding, course syllabus.

#### **Establishment**

Course syllabus for AF1716 valid from Autumn 2011

## **Grading scale**

A, B, C, D, E, FX, F

#### **Education cycle**

First cycle

## Main field of study

Architecture, Technology

# Specific prerequisites

Students in year 3 of the Bachelor of Science in Engineering programmes: Constructional Engineering and Design

AF1730 Bulding Information Modeling HS1008 Structural Design in Civil Engineering No fewer than 3.5 earned credits from the TENA and ÖVNA elements in HS1001 Structure and Design or equivalent courses

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

Upon completion of the course, students will:

- Have insight into construction techniques as creative expression
- Be able to illustrate the relationships between detail drawings, general arrangement drawings, and design
- Have insight into what effects customer's requirements as specified in a local programme, and consultants' requirements as specified in programme documents will have on building characteristics
- Have extensive knowledge of design methodology and apply that knowledge to a project
- Possess specialist knowledge of fire safety and be able to apply this in a project

#### **Course contents**

Course elements:

- Architecture, construction, and installation techniques
- Lectures on architecture, design, installation techniques, fire and noise
- A long individual design assignment that concludes with a class presentation
- Design of a building based on the requirements in the local programme including system documentation in a Building Information Modeling system, BIM

# Disposition

The course is based on a project that covers the entire period. The independent project is reinforced via lectures, seminars, literature studies, study visits, and individual and group exercises.

#### Course literature

Bodin, Anders: Arkitekturens handbok, ISBN 978-91-8600-900-7

Additional reading materials will be announced at the start of the course.

#### **Examination**

• PRO1 - Project, 5.0 credits, grading scale: A, B, C, D, E, FX, F

• TEN1 - Examination, 2.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

## Other requirements for final grade

To receive a final grade for this course, grade E or higher on the project as well as on the written examination are required.

Overall course grade is based on grading scale A-F.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.